

Commercial Dredging in the Pennsylvania
Waters of Lake Erie

By

William Nagel and Paul Knuth
Coastal Research Associates Inc.
October 1981

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COMMERCIAL DREDGING IN THE PENNSYLVANIA
WATERS OF LAKE ERIE

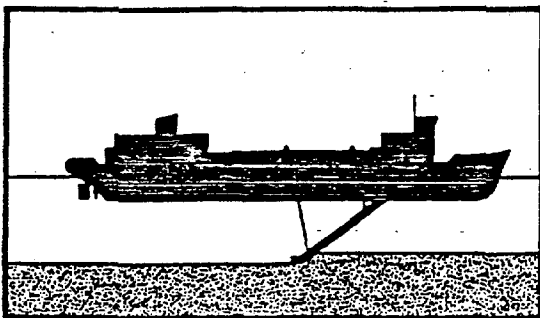
WILLIAM NAGEL
COASTAL RESEARCH ASSOCIATES, INC.

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COASTAL RESEARCH ASSOCIATES, INC.

FOR

LAKE ERIE INSTITUTE FOR MARINE SCIENCE
ERIE, PA

Funds for this investigation were furnished by a grant from the National Oceanic and Atmospheric Administration under provisions of the Coastal Zone Management Act of 1971 (P.L. No. 92-583) and the amendments of 1976, (P.L. No. 94-370) through the Pennsylvania Department of Environmental Resources, Coastal Zone Management Branch.



October, 1981

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LIST OF FIGURES

- Figure 1 Map of Erie Basin and Transverse Ridge that Connects Long Point With Presque Isle
- Figure 2 Bottom Topography and Potential Borrow Area of Commercial Sand and Gravel and Observed Dredge and Buoy Locations of the Erie Sand Steamship Company
- Figure 3 Dredge J.S. St. John
- Figure 4 Dredge J.S. St. John Showing Operations and Cargo
- Figure 5 Dredge J.S. St. John Approaching Erie Sand and Gravel Storage Facility, Erie, Pennsylvania
- Figure 6 Sand Removed From Pennsylvania Waters of Lake Erie, 1955 to 1980
- Figure 7 Dispersion of Sediment Subsequent to Dredging Activity
- Figure 8 Aeronautical Chart of the Lake Erie Area Showing the Two VOR Stations Used to Locate Dredging Activity and the Navigational Fixes Taken on the J.S. St. John

LIST OF TABLES

- Table 1 Volumes of Sand Dredged from Permitted Area (?) Since 1955
- Table 2 Monthly Volumes of Sand Removed from Pennsylvania Waters and
Royalties Paid to the Pennsylvania Fish Commission
- Table 3 Aerial Position Fixes of the Dredge St. John and Buoys Using
the VOR Navigation Aids

APPENDIX

- I. VOR Navigation System
- II. Communication From Erie Sand and Gravel Company
- III. Application for Pennsylvania Department of Environmental Resources
Water Obstructions Permit, 1980
- IV. Public Notice of Application for Federal Permit, 1980
- V. Monthly Statements of Dredging Operations, 1976 to August 1981 as
Reported to the Pennsylvania Fish Commission

INTRODUCTION

Concerns about dredging activities and subsequent effects to coastal environments have most often been considered in regard to water pollution and impacts to fish and wildlife populations, but seldom of physical impacts to the coastal zone. There are three major categories of dredging activities: (1) those involved with navigational dredging to improve and maintain channel and port depths; (2) industrial/commercial dredging to provide materials for development of sites suitable for building construction, and to provide materials (sand and gravel) useful as raw materials; and (3) dredging to develop and improve fish and wildlife habitat (Great Lakes Basin Commission, 1980). All three of these activities are primarily undertaken in nearshore areas or in estuaries and thus have a relatively high probability of influencing both the physical and biological features of these areas.

Removal of bottom materials and deposit of spoil in water or on shore can modify water currents and local air movement and thus influence processes contributing to the stability or instability of the natural shoreline. Nearshore removal of bottom sediments is potentially more influential to erosion than deep water dredging.

Since dredging is a possible cause of shoreline erosion and since commercial dredging has occurred in the Pennsylvania waters of Lake Erie for nearly 100 years, it is necessary, when attempting to analyze all factors influencing coastal zone erosion, to assess its effects on the Pennsylvania coastal area. This report will summarize the dredging activities of the

Erie Sand Steamship Company in the Pennsylvania waters of Lake Erie and consider the possible coastal impacts of their dredging activities.

OFFSHORE GEOLOGY AND SAND AND GRAVEL AVAILABILITY

The main geological features and estimates of sand and gravel availability have been outlined by Williams and Meisburger (1980) for the Pennsylvania region of Lake Erie. Their study showed that the greatest abundance of sand and gravel is located on the nearshore Presque Isle platform and an offshore elongate ridge that begins about eight (8) miles (12.87 km) northwest of Presque Isle and extends to Long Point, Canada (Fig. 1). A seventy-five (75) foot (22 m) trough separates the platform from the ridge. The ridge and platform are composed of glacial deposits which overlie shale bedrock.

Sand and gravel on the ridge area have been washed of fine grain sediment and are a source of high grade dredge material. The zone of maximum borrow material potential is shown in Figure 2. In this area the average depth of recoverable material is 7.4 feet (2.2 m) with a range between 2.5 feet (.74 m) and 12.7 feet (3.7 m). A conservative estimate of potentially dredgeable sand from the ridge is about 160 million cubic yards (121.6 million m³).

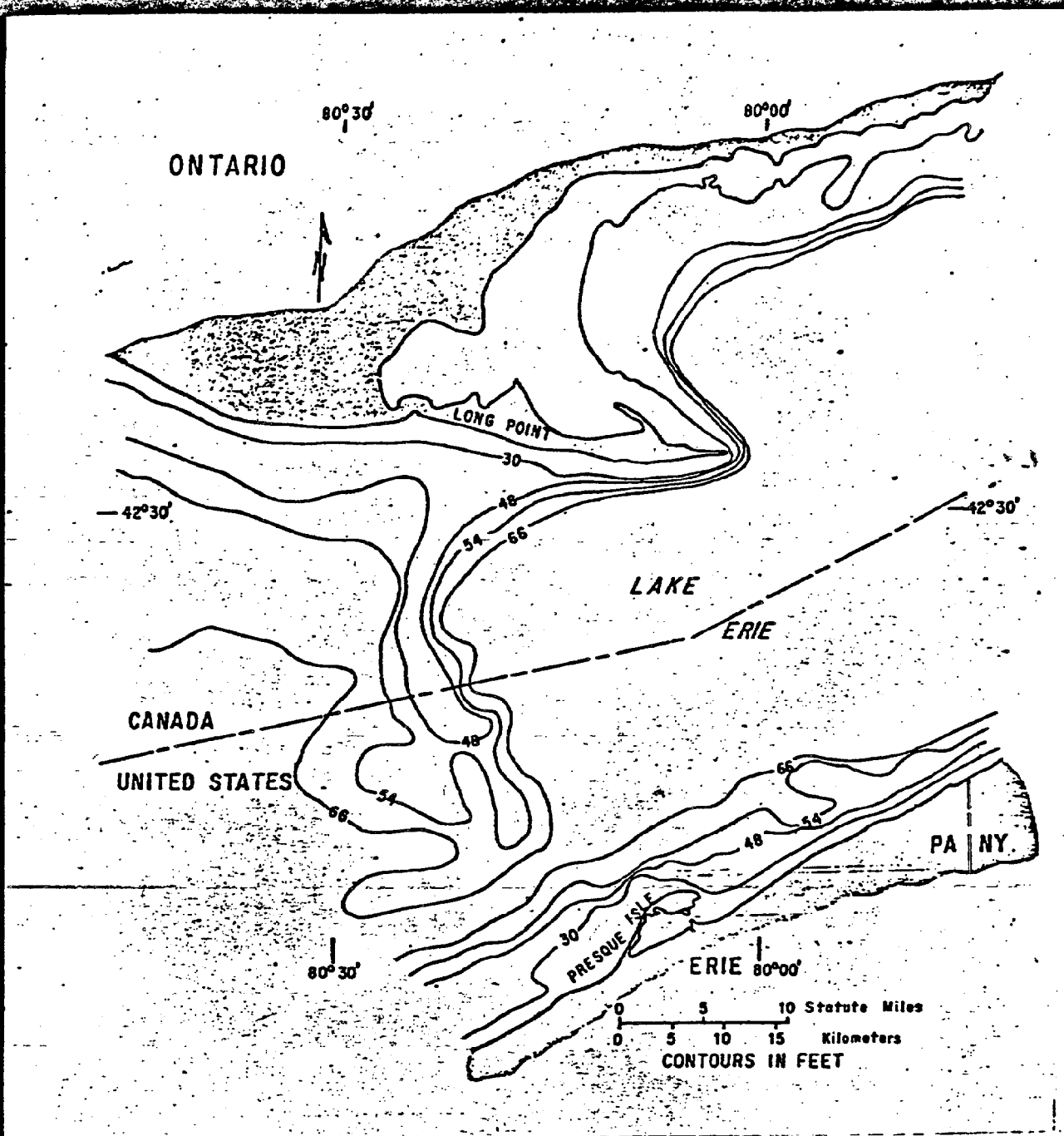


Figure 1. Map of the Erie basin and the transverse ridge that connects Long Point with Presque Isle.

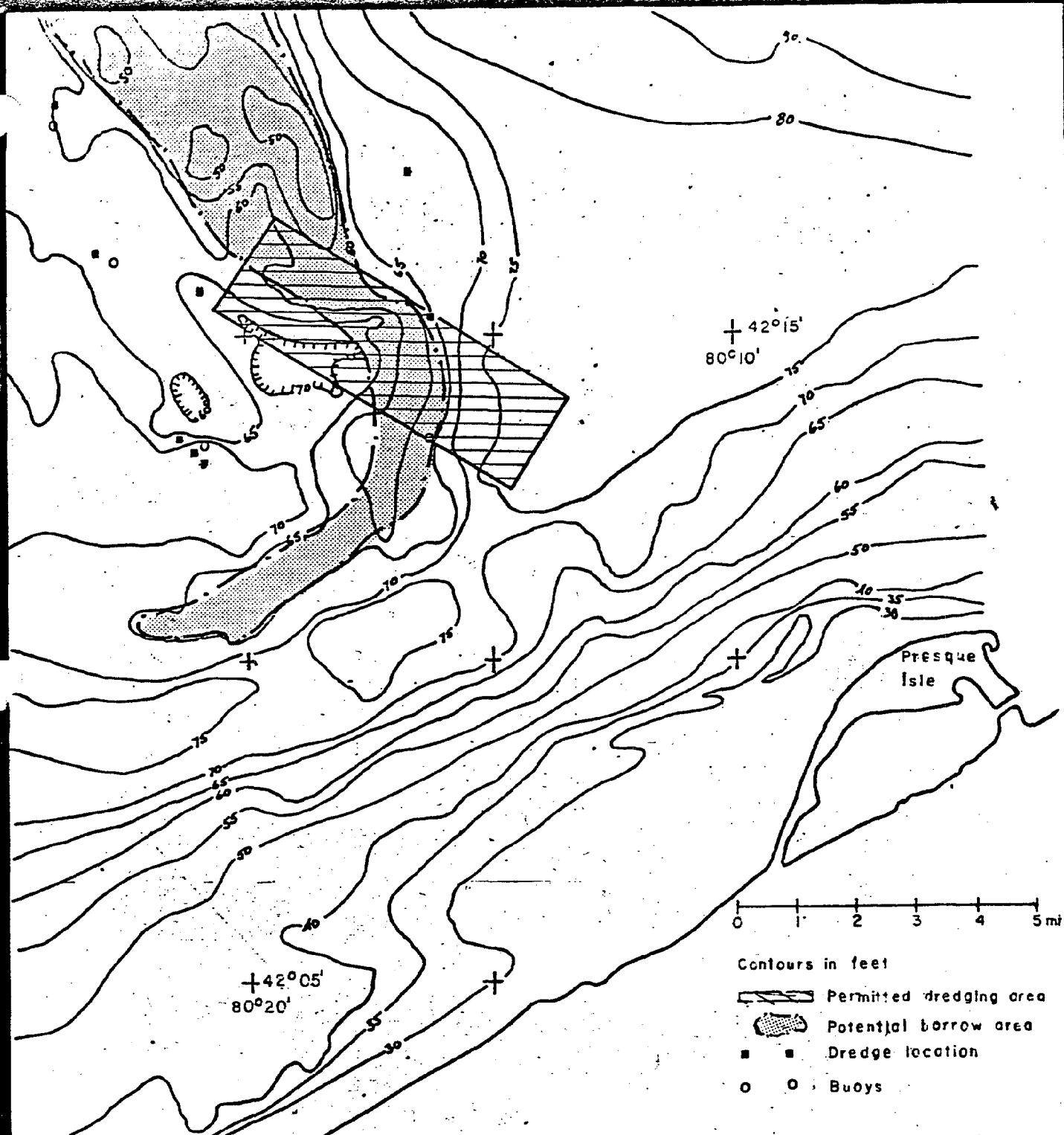


Fig. 2. Bottom topography and potential borrow area of commercial sand and gravel deposits, Lake Erie ridge and near-shore region, Pennsylvania (Source: CERC, 1980), and observed dredge and buoy locations of the Erie Sand Steamship Company.

ERIE SAND STEAMSHIP COMPANY

The Erie Sand Steamship Company has been operating in Pennsylvania since 1888. They currently have seven (7) sand and gravel dredges that work in the lower Great Lakes. In Lake Erie they are permitted to dredge in six (6) areas, two (2) in Canadian waters and one (1) in Pennsylvania waters.

The dredge J.S. St. John, a hopper dredge (Figs. 3 and 4) is the primary vessel working in Pennsylvania waters. It is a hydraulic dredge in the hopper category. "The hopper dredge is a self-propelled vessel, equipped with a hydraulic suction dredge system with hopper bins (Fig. 4) to contain and carry the dredged material to a place or disposal. The hopper dredge has the advantage of being highly mobile, less disruptive to vessel traffic, and can operate in waters too rough for a pipeline dredge" (Allen and Hardy, 1980). It has a hydraulic boom 65 feet long and a holding capacity of 550 cubic yards (418 m^3). During most of the dredging season, April through December, it obtains, usually, one load per day, leaving the Port of Erie at about 5:00 a.m. and returning by 11:00 a.m. It occasionally makes a second run during the late evening and early morning hours. In addition, the dredge Lakewood [capacity 3,450 cubic yards (2622 m^3)] operates in Pennsylvania waters about two days per week. All of the sand obtained in Pennsylvania waters is off-loaded in Erie at a facility belonging to Erie Sand and Gravel Company on Presque Isle Bay (Fig. 5).

Since 1970 the Erie Sand Steamship Company has paid a royalty to the Pennsylvania Fish Commission for materials removed from Lake Erie. The current royalty fee is \$.15 per cubic yard.

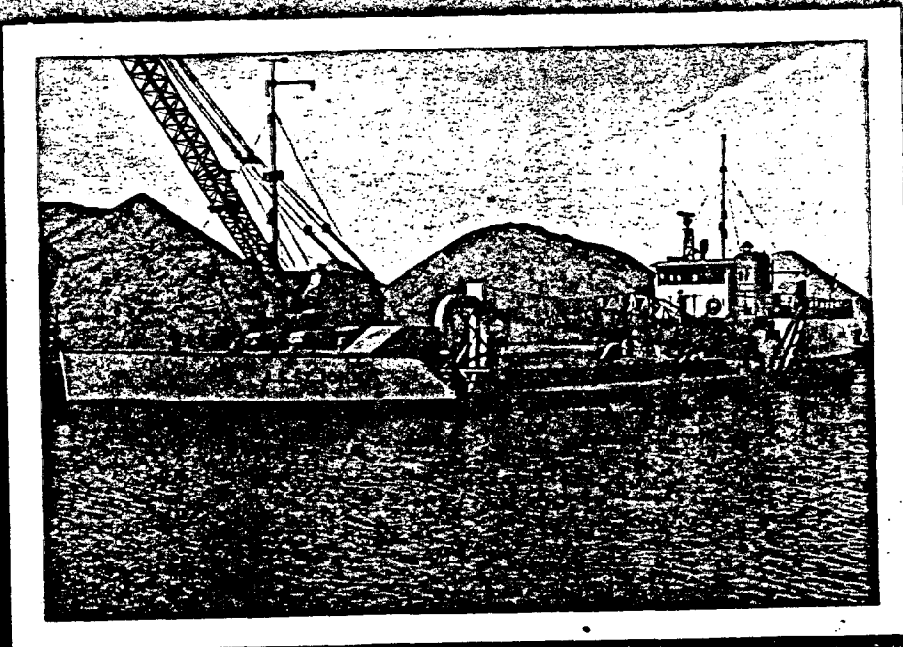


Fig. 3

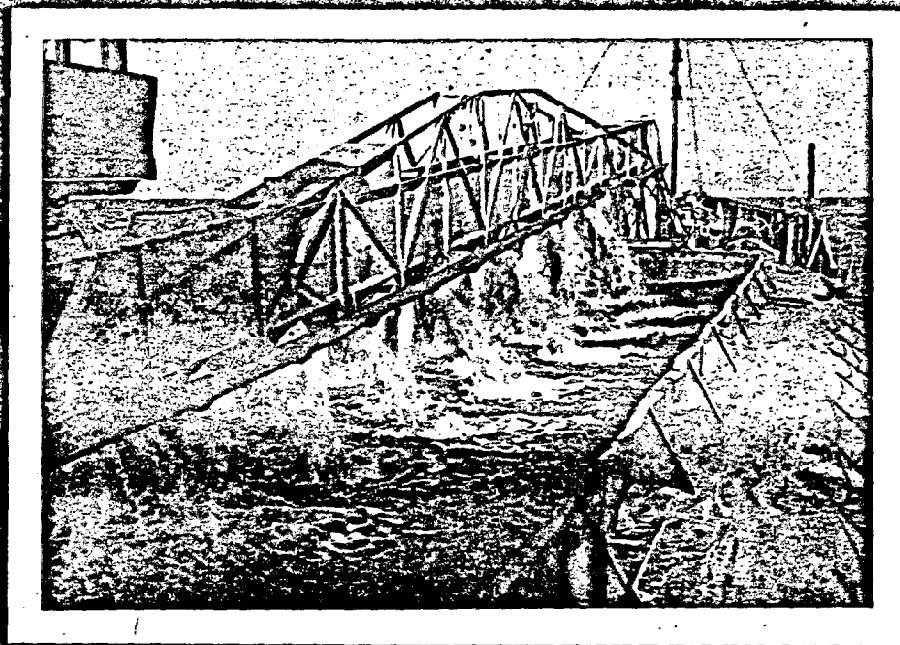


Fig. 4

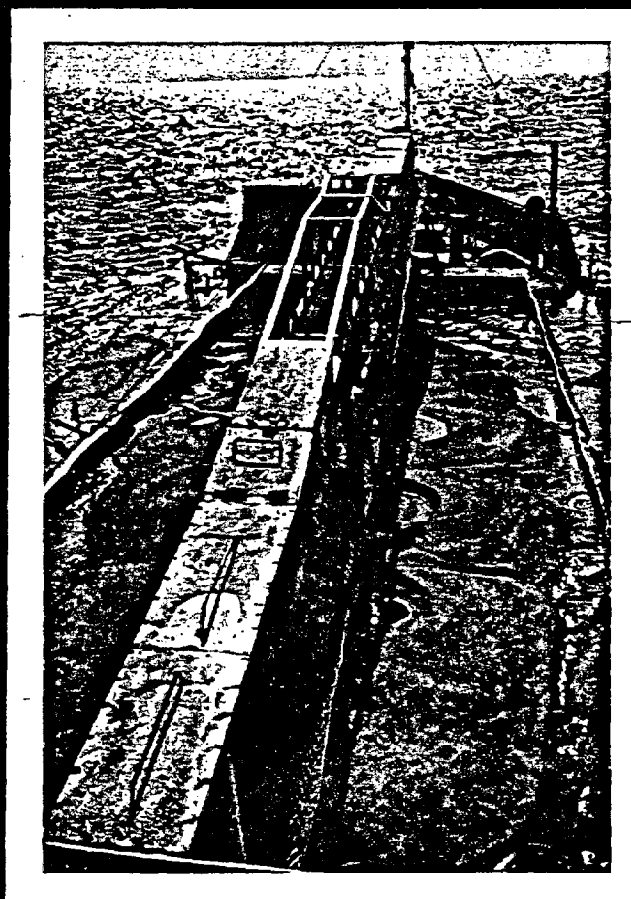


Table 1. Volumes of Sand Dredged from Permitted Area (?) Since 1955. (Data Supplied by Erie Sand Steamship Company).

<u>Year</u>	<u>Cubic Yards Dredged</u>
1955	510,000*
1956	575,430
1957	683,998
1958	525,000*
1959	650,000*
1960	518,350
1961	500,000*
1962	450,000*
1963	452,000*
1964	513,450
1965	524,750
1966	588,425
1967	625,285
1968	571,405
1969	500,280
1970	465,020
1971	439,495
1972	372,005
1973	312,730
1974	252,585
1975	434,780
1976	339,765**
1977	190,520**
1978	254,467**
1979	230,098**
1980	184,875

Total: 11,670,713

*Estimated. **See Table for discrepancy.

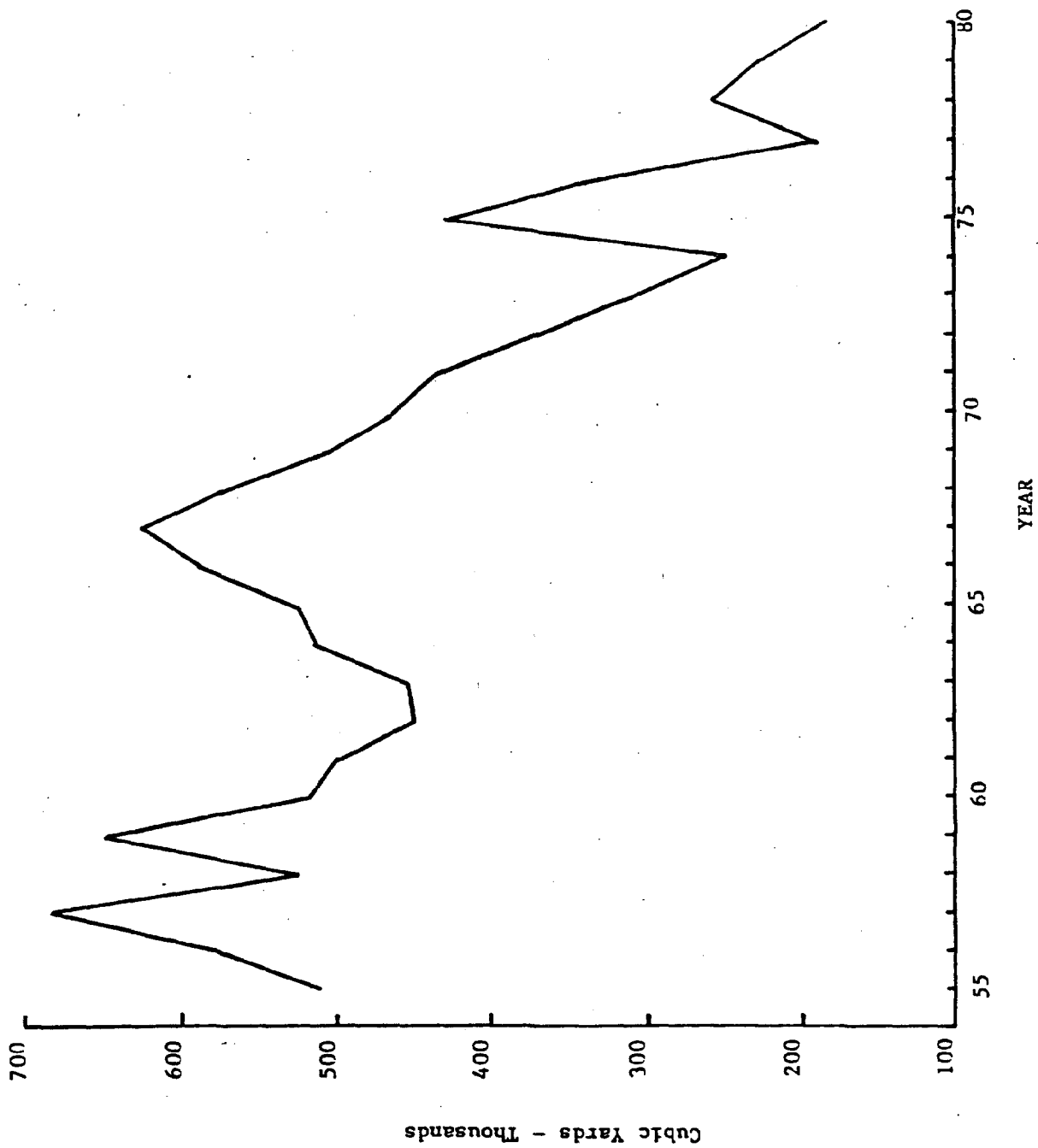


Fig. 6. Sand removed from Pennsylvania waters of Lake Erie, 1955-1980.

Records of the volume of sand presumably dredged from the designated area are maintained by the Erie Sand Steamship Company and supplied to the Pennsylvania Fish Commission each month. Data since 1955 are listed in Table 1 and plotted in Figure 6. The Fish Commission supplied copies of the monthly reports submitted to them since 1976 (Appendix V). Interestingly, the data for those same years supplied by the Erie Sand Steamship Company are different for four of the five years (Table 2). This raises the question as to how the volumes are determined and how records are maintained by the Company.

The reasons for the decline in volumes of sand removed since 1967 were not given to us by the Erie Sand Steamship Company. However, there is no evidence to show that the potential borrowable sand supply is being depleted.

It is difficult to determine how many vessels are involved in the dredging operation in Pennsylvania waters and how frequently they operate. If the dredge J.S. St. John (capacity 550 cubic yards) were to make two trips a day for twenty-five days each month and the dredge Lakewood (capacity 3,450 cubic yards) were to make nine trips per month, only about 49,000 cubic yards per month would be removed. Many months show that more than this volume was actually removed. How was this accomplished? Unless access to the ship's logs are made available it will not be possible to determine how the dredging company determines the volumes of sand and gravel removed.

Table 2. Monthly volumes of sand (cu. ft.) removed from the Pennsylvania waters and royalties paid to the Pennsylvania Fish Commission.
(Data supplied by Fish Commission).

<u>Month</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>

April	45,485	6,600	13,250	9,525	5,925	5,325
May	67,110	29,845	47,440	29,425	31,225	26,175
June	56,510	29,550	41,300	44,825	18,875	31,525
July	43,355	35,000	33,300	32,125	33,650	31,150
August	39,000	22,025	33,840	38,020	20,895	27,170
September	26,080	18,435	29,037	25,725	19,975	
October	43,755	23,820	27,150	28,735	25,425	
November	6,820	21,685	22,080	17,800	19,505	
December	<u>1,700</u>	<u>3,610</u>	<u>6,975</u>	<u>4,700</u>	<u>9,400</u>	
TOTALS:	329,815	190,570	293,322	230,880	184,875	121,345
Royalty:	\$50,972.25	\$28,585.50	\$38,155.80	\$34,632.00	\$27,731.25	\$18,201.75
Royalties paid since 1970:	<u>\$520,069.05</u>					

The Erie Sand Steamship Company is currently operating under a five-year permit issued in 1980 to dredge in a twelve (12) square mile (31.2 km^2) area located northwest of the Presque Isle lighthouse (Fig. 2) (Hair, 1980), in which they are permitted to remove "up to 250,000 cubic yards ($190,000 \text{ m}^3$)" of sand and gravel by the hydraulic dredge. According to the permit "the dredged material will be wet screened and fines (liquid phase dredging material) will be returned to the lake" (Fig. 7). "The material brought to shore will be placed on upland property and then sold."

The designated dredge area is located on the ridge moraine but only about half of the area overlies the zone of maximum borrowable sand deposits as indicated by the Williams and Meisburger (1980) study (Fig. 2).

A Pennsylvania Commonwealth law requires that the Erie Sand Steamship Company pay a royalty to the Pennsylvania Fish Commission for each cubic yard of sand removed (based on 3,000 pounds per adjusted dry weight) at the rate of \$.15 per cubic yard. From January, 1976 to August, 1981 approximately \$198,000 in royalties have been paid. (Records prior to 1976 have been purged from the Fish Commission's files). The company files a monthly report of the volume of sand dredged to the Fish Commission. According to Mr. P.F. O'Brian, Director, Bureau of Administrative Services, Pennsylvania Fish Commission, audits of the Erie Sand Steamship Company are made infrequently. The Fish Commission is thus relying upon accurate reporting from the Erie Sand Steamship Company. The amounts of sand removed since 1976 are listed in Table 2.

While the permit specifies that violation of the terms of the permit can result in revocation of the permit, neither the Army Corps of Engineers



Fig. 7

nor the Pennsylvania Department of Environmental Resources monitor the activities of the Erie Sand Steamship Company. Indeed, there are no records to show that the dredging operation has ever been monitored.

SURVEILLANCE

Between 28 August 1981 and 14 October 1981 ten (10) flights on randomly selected days were made from Erie International Airport to locate and fix the position of the dredge operating in the Pennsylvania waters of Lake Erie. The flights were made between 7:00 a.m. and 8:00 a.m. in a Cessna 152 aircraft equipped with a VOR navigation system (Appendix I). Position fixes of the dredge were recorded as the plane flew directly overhead. The accuracy of such a fix is dependent on several factors, the primary one being the accuracy of the onboard VOR equipment. The equipment was checked at a VOR test facility at the Erie International Airport. The test indicated a maximum error of $\pm 2^\circ$ on one indicator and $\pm 0^\circ$ on the second indicator. The location of the two VOR stations used in determining a position fix and the observed locations of the dredge are shown on Figure 8 and displayed on Table 3. Only once in ten (10) sightings was the dredge within the permitted area. Even allowing a $\pm 2^\circ$ error and adjusting to position fixes, only twice would the dredge have been within the permitted area. On two occasions dredging was observed in Canadian waters, and on another occasion a larger dredge with the markings of the Erie Sand Steamship Company was sighted on the International border near the main shipping lanes. The dredge was engaged in dredging at the time (Fig. 6 and Table 3). These observations raise the question as to the need for a permit that encompasses a relatively small area of the total borrowable sand deposits and one whose terms are neither observed by the issuee nor monitored by the issuer(s).

In addition to the observations made of the dredging operation, locations of six buoys presumably used to assist in determining dredging sites were also made (Fig. 2). None of these buoys were located within the permitted area,

Figure 8. Aeronautical chart of the Lake Erie area showing the two VOR stations used to locate dredge positions.

Scale 1:500,000

Permitted dredging area

Dredge locations

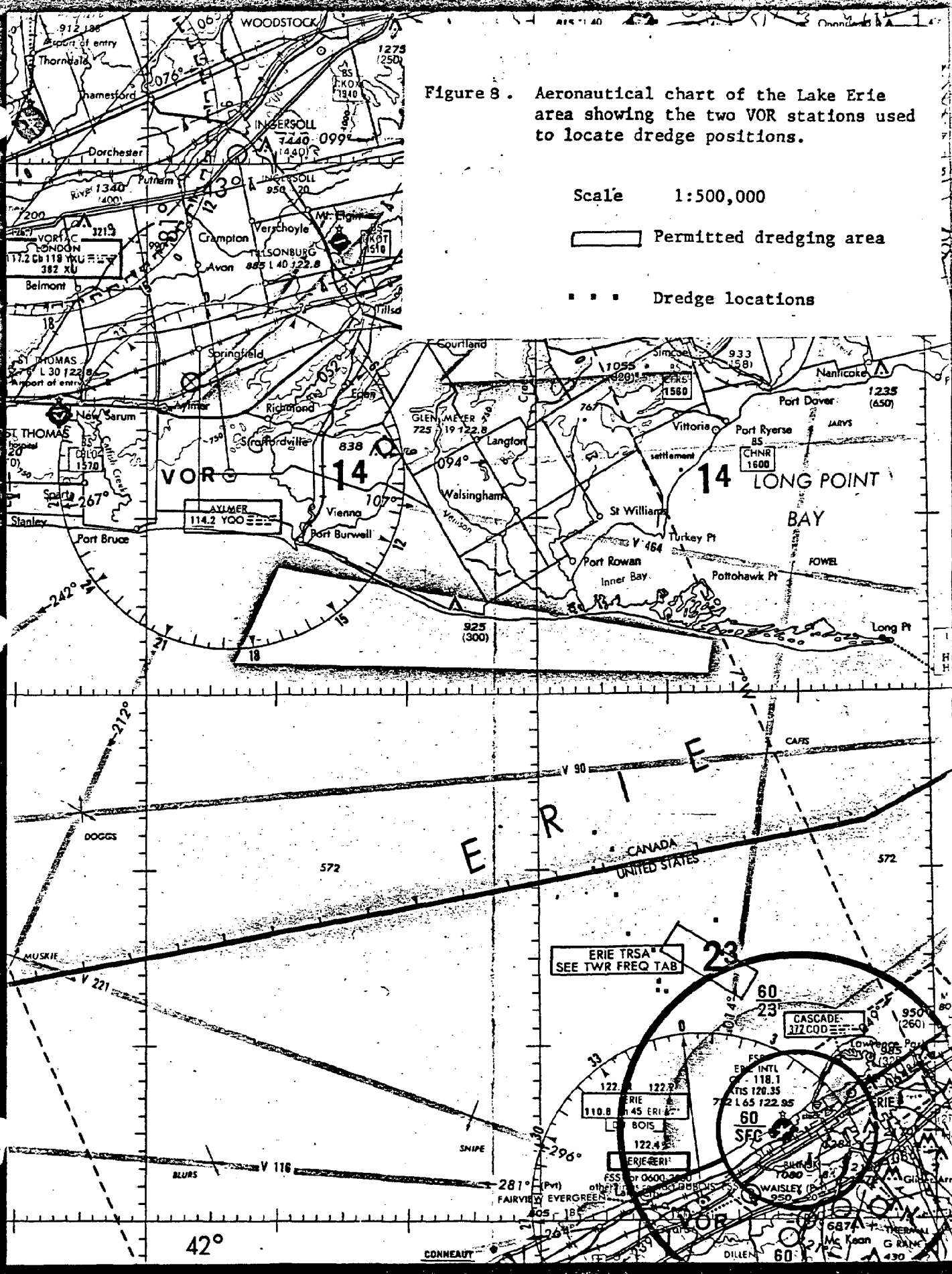


Table 3. Aerial position fixes of the dredge J.S. St. John and buoys using VOR navigation aids.

<u>Date</u>	<u>Time</u>	<u>VOR Magnetic Radial Bearing</u>	
		<u>Aylmer, Ontario</u>	<u>Erie, Pennsylvania</u>
Aug. 28	7:55 a.m.	140°	010°
Aug. 31	8:50 a.m.	148°	355°
Sept. 18	8:20 a.m.	142°	012°
Sept. 21	7:35 a.m.	146°	358°
Sept. 25	7:40 a.m.	142°	351°
Sept. 29	7:45 a.m.	147°	356°
Sept. 30	7:44 a.m.	148°	352°
Oct. 12	7:58 a.m.	142°	353°
Oct. 13	8:05 a.m.	147°	352°

and (observation of a larger dredge, presumably owned by the Erie Sand Steamship Company

145°	349°)
144°	012°
147°	352°

(location of two buoys)

Oct. 14	8:00 a.m.	146°	351°
Oct. 16	4:00 p.m.	148°	355°
		146°	351° (paired buoys)

DREDGING IMPACTS

In 1970, the Great Lakes Laboratory monitored the dredging activities of the J.S. St. John for evidence of nutrient enrichment in the forms of phosphate and nitrogen compounds and changes in oxygen content of the waters adjacent to the dredging operations. The results of the study led to the conclusion that "...the effect of dredging on the ecology of Lake Erie is negligible at most" (Great Lakes Laboratory, 1970).

Studies by the International Joint Commission (1978) have shown that the following water quality pollutants are contained in in-lake sediments: phosphorous, PCB's, pesticides, industrial organics, mercury, and lead. The influence of dredging activities on the dispersal of these materials in the water column (Fig. 6) and the amounts contained in the dredged material have not been ascertained.

While navigational dredging has been shown to have both negative and positive effects on fish and wildlife (Allen and Hardy, 1980), little has been done to evaluate the effects of offshore dredging in relatively deep waters. According to Hair (1980) the proposed dredging by the Erie Sand Steamship Company "...will not affect a species proposed by the U.S. Department of Interior as threatened or endangered nor will it affect the critical habitat of any such species."

The awarding of a dredging permit by the Pennsylvania Department of Environmental Resources assumes that the following possible influences have been considered: "...conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage

prevention, land use, navigation, recreation, water supply, water quality, energy needs, safety, food production, and in general, the needs and welfare of the people" (Hair, 1980).

The main concerns about offshore dredging in Lake Erie are about how such an activity might influence coastal zone processes. The natural trough between Presque Isle platform and the offshore ridge complex (Fig. 2) would tend to prevent the movement of sand from one area to another. The removal of sand from the ridge, either inside of or outside of the permitted area, should not cause sand from the platform to move away from the shore area. As indicated in the topographic features on the lake bottom the existence of depressions near the permitted area suggest that the creation of these depressions by dredging has permanent "holes" on the ridge floor. That these holes have not filled in indicates that the bottom sediments on the ridge area are stable and not influenced by either dredging or bottom currents.

CONCLUSIONS

1. So long as sand and gravel is dredged to the northwest of the bottom trough separating the Presque Isle platform from the transverse ridge extending to Long Point, Canada, no adverse effects to the Pennsylvania shoreline or coastal erosion processes should be expected.
2. The Erie Sand Steamship Company dredges were only observed once in ten times dredging in the permitted area. Although dredging was always to the northwest of the trough.
3. The amounts of sand and gravel removed are determined solely by the dredging company. Since they pay a royalty to the Commonwealth, it would seem advantageous to impose some controls on this procedure.
4. There is no evidence that any of the regulatory agencies involved in regulating dredging in Lake Erie, the U.S. Army Corps of Engineers, the Pennsylvania Department of Environmental Resources, and the Pennsylvania Fish Commission, have ever monitored or currently intend to monitor these operations. If this is so, why is it necessary to designate such a small area of the potentially large area of borrowable materials as the only area from which sand and gravel can be removed?

REFERENCES

- Allen, K.O., and J.W. Hardy, 1980. Impacts of navigational dredging on fish and wildlife: a literature review. U.S. Fish and Wildlife Service, Biological Services Program. FWS/OBS-80/07. 81 pp.
- Great Lakes Basin Commission. 1980. Dredging in the Great Lakes. Implications of dredging policies to transportation planning and management in the U.S. coastal zone. Summary Proceedings. Ann Arbor, Michigan. 120 pp.
- Great Lakes Laboratory. 1970. Evaluation of the ecological impact of sand dredging on Lake Erie for Erie Sand Steamship Company, Erie, Pennsylvania. State University at Buffalo. 11 pp.
- Hair, L.H. 1980. Public notice. Application for a permit under authority of Section 10 of the River and Harbor Act of 1899 and Section 404 of the Clean Water Act. NCBCO-S Re: 80-476-6. Department of the Army, Corps of Engineers, Buffalo, New York. 3 pp.
- International Joint Commission. 1978. Environmental management strategy for the Great Lakes system. Report from the International Reference Group on Great Lakes Pollution from Land Use Activities (PLUARG). Windsor, Ontario, Canada. 115 pp.
- Williams, S.J., and E.P. Meisburger. 1980. Sand and gravel resources offshore Presque Isle, Pennsylvania. Coastal Engineering Research Center, U.S. Army Corps of Engineers, Fort Belvoir, Virginia. Draft report. 67 pp.

VOR NAVIGATION

VOR, very high frequency omnidirectional range, is one of the most important navigational aids to general aviation. A VOR station transmits radio beams, called radials, outward in every direction. Airborne VOR equipment is used to detect these radiated signals and indicate position relative to the VOR station. Each radial is numbered according to its bearing from the station. A circular azimuth is drawn around each VOR station on aeronautical charts, with the 0° radial pointed at magnetic north. Thus, the 090° radial of a VOR represents a magnetic course of 090° away from the station, and it is located 090° clockwise from the 0° radial. The radials are all magnetic courses.

A VOR position fix can be obtained to determine an aircraft's position in relation to two VOR stations. The navigation receiver is tuned to one VOR station and a magnetic bearing is obtained and can be plotted on the chart. The receiver is then tuned to a second VOR station and a second bearing is received and charted. The intersection of these lines marks the aircraft's position. In aircraft equipped with more than one navigation receiver and VOR indicator (as in this study) both VOR radials can be located at the same time. This saves time and gives a more precise location fix.

ERIE SAND & GRAVEL COMPANY

622 OFFICE & DOCK FOOT SANDUSKY, OHIO

ESTABLISHED 1888

SIDNEY E. SMITH, Jr.
PRES. & MGR.

LAKE SAND AND GRAVEL

A Subsidiary of Koppers Co., Inc.

Erie, Pa.

SAND - GRAVEL
CONCRETE
PLASTER
ASPHALT
FOUNDRY
TRACTION

October 26, 1981

Mr. Paul Knuth
Edinboro State College
P. O. Box 117
Edinboro, Pa. 16412

SAND DREDGING AREA "C"

Enclosed is a summary of the dredging off Presque Isle at Area "C" for the period 1955 through 1980. The other column showing sand sold in the local market is the sand delivered to our dock and Erie Builders.

I have also enclosed a copy of our dredging permit drawing showing the location of the dredging area.

If we can help in any other way, please give us a call.

Harry K. Goodman

HARRY K. GOODMAN, VICE PRESIDENT

Encls: 2

PRICES NOT COVERED BY CONTRACT SUBJECT TO CHANGE WITHOUT NOTICE. FREIGHT RATES ARE QUOTED FOR INFORMATION AND NOT GUARANTEED
ALL CONTRACTS CONTINGENT UPON WEATHER CONDITIONS, STRIKES, ACCIDENTS AND OTHER CAUSES OF DELAY BEYOND OUR CONTROL.

ERIE, PA. - LORAIN - SANDUSKY, OHIO



AREA "C" DREDGING

1955 - 1980

<u>Year</u>	<u>Cubic Yards Dredged</u>	<u>Sold in Local Market</u>
1980	184,875	105,500
1979	230,098	143,305
1978	254,467	162,967
1977	190,520	133,350
1976	339,765	269,465
1975	434,780	295,080
1974	252,585	155,010
1973	312,730	196,580
1972	372,005	231,708
1971	439,495	236,195
1970	465,020	187,670
1969	506,280	242,630
1968	571,405	269,273
1967	625,285	200,450
1966	588,425	202,750
1965	524,750	212,700
1964	513,450	152,000
1963	452,000 est.	123,088
1962	450,000 est.	69,150
1961	500,000 est.	143,400
1960	518,350	187,800
1959	650,000 est.	330,200
1958	525,000 est.	179,580
1957	683,998	193,049
1956	575,430	206,280
1955	510,000 est.	234,000

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
APPLICATION FOR WATER OBSTRUCTION PERMIT

October 28, 1980.

In compliance with the provisions of an Act of the General Assembly of the Commonwealth of Pennsylvania, entitled, "An act providing for the regulation of Dams or other structures or obstructions, as defined herein, in, along, across or projecting into all streams and bodies of water wholly or partly within, or forming part of the boundary of, this Commonwealth; vesting certain powers and duties in the Water Supply Commission of Pennsylvania, for this purpose; and providing penalties for the violation of the provisions hereof," approved the 25th day of June, A.D. 1913, as amended by Act No. 137, approved May 6, 1937, and "The Administrative Code" which empowers the Department of Environmental Resources to exercise certain powers and perform certain duties by law vested in and imposed upon the Water Supply Commission of Pennsylvania, and the Water and Power Resources Board.

ERIE SAND STEAMSHIP COMPANY
(Here state name of person or persons, partnership, association, corporation, county, city, borough, town, or township.)

hereby makes application for the consent or permit of the Department of Environmental Resources to ~~construct, alter, extend, or maintain~~ change the ~~cross section~~ cross section

~~in Lake Erie~~ of Lake Erie
(Here state name of stream or other body of water.)

at a point designated by the Water and Power Resources Board as "Area C".
(Here give location, by distance from mouth of stream, county, township, or municipal boundary; also give city, town or township and county in which located.)

off the shore of Presque Isle in Erie County

CITY OF ERIE

for the purpose of dredging sand & gravel for commercial purposes.
(Here state fully the purpose, necessity, and description of the proposed obstruction.)

25-41

(Continued on other side)

OCT 31 1980

\$100

in accordance with the complete maps, plans, profiles, and specifications filed with this application and made a part hereof.

ERIE SAND STEAMSHIP COMPANY

Sidney E. Smith Jr.
Signature and Title Sidney E. Smith Jr., Pres.

SEAL:

If privately owned, the individual owner, or each member of a partnership, should sign the application. If owned by a corporation, it should be signed by the president, the corporate seal affixed and attested by the secretary, and, if owned by a city, borough, township or county, it should be signed by the Chief officer, Supervisors or Commissioners, the seal affixed and attested by the clerk.

WITNESS:

Robert H. Brown
(Address) P.O. Box 153

Erie, Pa. 16512

NOTE: This application, together with all maps, plans, profiles and specifications, and all papers, information and data filed in connection therewith, will remain on file in the office of the Department.

NOTE: Submit this application in single copy only, WITH DUPLICATE SET OF PLANS. All references to Department of Forests and Waters and/or the Water and Power Resources Board in this Document may be interchangeably known by its successor, Department of Environmental Resources.



DEPARTMENT OF THE ARMY
BUFFALO DISTRICT, CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207

NC200-S Re: 80-476-6

24 December 1980

PUBLIC NOTICE

Application for a Permit under Authority of
Section 10 of the River and Harbor Act of 1899
and Section 404 of the Clean Water Act

Erie Sand Steamship Company, Foot of Sassafras Street, Erie, Pennsylvania 16512, has applied for a Department of the Army permit to annually dredge about 250,000 cubic yards of sand and gravel by hydraulic dredge, for commercial purposes. The requested permission is for the purpose of continuing to dredge in an area previously authorized by the Department of the Army and the Commonwealth of Pennsylvania. The dredged material will be wet screened on the dredge and the water and fines (liquid phase dredging material) will be returned to the lake. The material brought to shore will be placed on upland property and then sold. The phase of the work requiring authorization under Section 404 of the Clean Water Act is the discharge of liquid phase dredged material to the lake. If a permit is issued, this office intends to authorize the work for a five year period. The project is located in Lake Erie in the established area off Presque Isle, Pennsylvania. Details of the project are shown on the attached drawings.

A preliminary determination indicates that an Environmental Impact Statement will not be required for this project. The latest published version of the National Register of Historic Places has been consulted. There are no registered properties or properties listed as being eligible for inclusion therein that will be affected by this project. By this notice, the Heritage Conservation and Recreation Service (HCRS) is advised that presently unknown archeological, scientific, prehistorical or historical data may be lost or destroyed by work to be accomplished under the requested permit.

Based on the review of available environmental data we have determined that the proposed work will not affect a species proposed or designated by the U.S. Department of the Interior as threatened or endangered nor will it affect the critical habitat of any such species. Therefore, unless additional information indicates otherwise no formal consultation pursuant to Section 7 of the Endangered Species Act Amendments of 1978 will be undertaken with the U.S. Fish and Wildlife Service.

The following authorizations are required for this project:

1. Permit or waiver thereof from the Commonwealth of Pennsylvania Department of Environmental Resources.

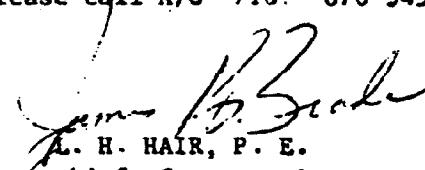
2. Water Quality Certification (or waiver thereof) from the Commonwealth of Pennsylvania Department of Environmental Resources.

This notice is promulgated in accordance with Title 33, Code of Federal Regulations, parts 320-329. Any interested parties and/or agencies desiring to express their views concerning the proposed work may do so by filing their comments, in writing, no later than 4:30 p.m., 30 days from the date of issuance of this notice. A lack of a response will be interpreted as meaning that there is no objection to the proposed work.

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposal on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered; among these are conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use, navigation, recreation, water supply, water quality, energy needs, safety, food production, and in general, the needs and welfare of the people. No permit will be granted unless its issuance is found to be in the public interest.

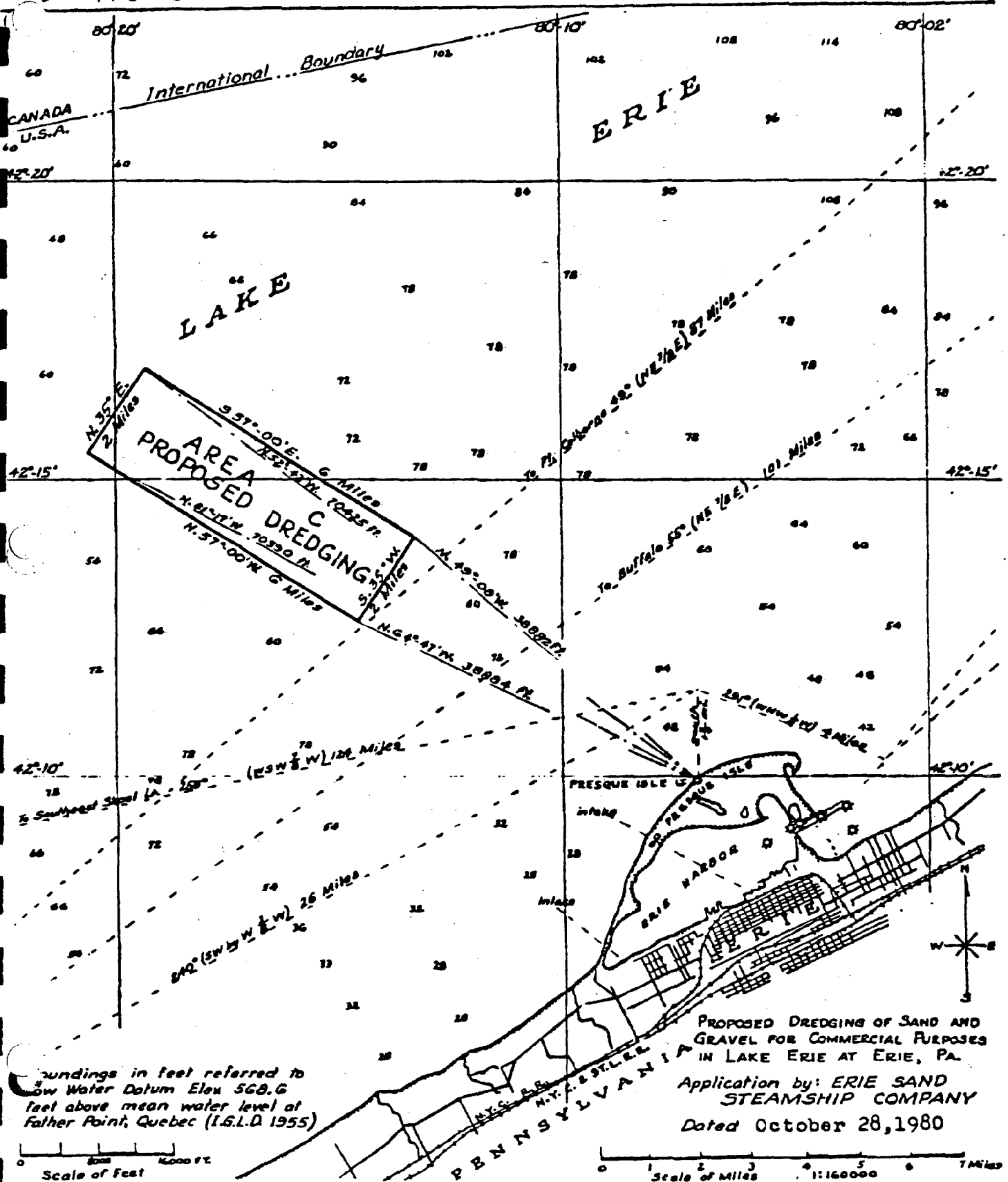
This activity involves the discharge of dredged or fill material into waters of the United States. Therefore, the evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404 (b) of the Clean Water Act (40 CFR part 230).

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. If you have any questions concerning this matter, please call A/C 716. 876-5454, extension 2313.


J. H. HAIR, P. E.
Chief, Construction-
Operations Division

NOTICE TO POSTMASTER: It is requested that this notice be posted continuously and conspicuously for 30 days from the date of issuance.

80-476-6



Soundings in feet referred to
Low Water Datum Elev 568.6
feet above mean water level at
Father Point, Quebec (I.G.L.D. 1955)

PROPOSED DREDGING OF SAND AND
GRAVEL FOR COMMERCIAL PURPOSES
IN LAKE ERIE AT ERIE, PA.

Application by: ERIE SAND
STEAMSHIP COMPANY

Dated October 28, 1980

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of January 19 76

Handwritten: VED
FEB 9 8 15 AM '76

PENNSYLVANIA
FISH COMMISSION

Company Erie Sand Steamship Company

Address Post Office Box 153, Erie, Pennsylvania 16512

<u>*Tons or Cubic Yards</u> <u>Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u> </u> Tons <input checked="" type="checkbox"/> Sold			
<u> </u> CYS <input checked="" type="checkbox"/> Dredged	NIL		-0-

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.

Handwritten Signature: Robert D. Boorum

Authorized Signature

2/6/76
Date

Robert D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services,
Pennsylvania Fish Commission, P. O. Box 1673
Harrisburg, Pa. 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of February 1976

RECEIVED
MAR 4 9 45 AM '76
PENNSYLVANIA
FISH COMMISSION

Company Erie Sand Steamship Company

Address Post Office Box 153, Erie, Pennsylvania 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input type="checkbox"/> Sold	<u> </u>	<u> </u>	<u> </u>
<u>-0-</u> CYs <input type="checkbox"/> Dredged	<u> </u>	<u> </u>	<u> </u>

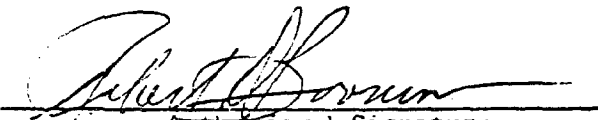
NIL

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Robert D. Boorum, Controller

March 1, 1976
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services,
Pennsylvania Fish Commission, P. O. Box 1673
Harrisburg, Pa. 17120

Vince

VED

APR 6 3 52 PM '76

PENNSYLVANIA
FISH COMMISSION

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of March 19 76

Company Erie Sand Steamship Company

Address Post Office Box 153, Erie, Pennsylvania 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due


<u> </u> Tons <input type="checkbox"/> Sold			
<u>-0-</u> CYs <input checked="" type="checkbox"/> Dredged	Lake Sand		NIL

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

April 1, 1976
Date

Robert D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services,
Pennsylvania Fish Commission, P. O. Box 1673
Harrisburg, Pa. 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of April 19 76

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MAY 20 8 23 AM '76

PENNSYLVANIA
FISH COMMISSION

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, Pennsylvania 16512

<u>Tons or Cubic Yards</u> <u>Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u> </u> Tons <input type="checkbox"/> Sold			
<u>45,485</u> CYs <input checked="" type="checkbox"/> Dredged	lake sand	.15c	\$6,822.75

*Use appropriate line and check applicable block.

**10c per adjusted dry ton of 2,000 lbs. or

15c per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Robert D. Boorum, Controller

5/13/76
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services,
Pennsylvania Fish Commission, P. O. Box 1673
Harrisburg, Pa. 17120

CK. # 11809

5/17/76

6,822.75

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of May 19 76

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PENNSYLVANIA
FISH COMMISSION

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, Pa. 16512

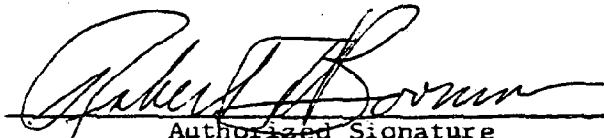
<u>Tons, or Cubic Yards</u> <u>Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u> </u> Tons <input type="checkbox"/> Sold			
<u>67,110</u> CYs <input checked="" type="checkbox"/> Dredged	lake sand	.15¢	\$10,066.50

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

Robert D. Boorum, Controller

6/11/76
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services,
Pennsylvania Fish Commission, P. O. Box 1673
Harrisburg, Pa. 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of June 19 76

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JUL 19 12 02 PM '76
PENNSYLVANIA
FISH COMMISSION

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, Pa. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

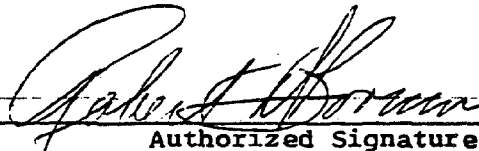
<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>56,510</u> <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	<u>lake sand</u>	<u>.15c</u>	<u>\$8,476.50</u>

*Use appropriate line and check applicable block.

**10c per adjusted dry ton of 2,000 lbs. or

15c per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

Robert D. Boorum, Controller

7/12/76
Date
7/12/76

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

• Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

CHK 12248

7/15/76

\$ 8476.50

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of July 19 76

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PENNSYLVANIA
FISH COMMISSION

Company Erie Sand Steamship Company
Address P.O. Box 153 Erie, Pennsylvania 16512

<u>*Tons or Cubic Yards</u> <u>Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
Tons <input type="checkbox"/> Sold			
43,355 CYs <input checked="" type="checkbox"/> Dredged	Lake Sand	.154	\$6503.25

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Emtrulle

8/9/76

Date

Due: 25th of Following Month
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services,
Pennsylvania Fish Commission, P. O. Box 1673
Harrisburg, Pa. 17120

CK# 12454

8-16-76

1 6503.25

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of August 19 76

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Pennsylvania 16512

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SEP 22 10 08 AM '76
PENNSYLVANIA
FISH COMMISSION

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due


<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>39,000</u> <u>Yds</u> <input checked="" type="checkbox"/> <u>Dredged</u>	<u>Lake Sand</u>	<u>.15c</u>	<u>\$5,850.00</u>

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

9-7-76

Date

R. D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

CK # 12666

9-20-76

15850.00

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of September 19 76

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OCT 22 11 46 AM '76
PENNSYLVANIA
FISH COMMISSION

Company Erie Sand Steamship Company
Address P.O.Box 153 Erie, Pennsylvania 16512


<u>*Tons or Cubic Yards</u>		<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u>Sold During Month</u>				
<u> </u> Tons <input type="checkbox"/> Sold				
26,080		Lake Sand	15¢ cu. yd.	\$3912.00
<u> </u> CYs <input checked="" type="checkbox"/> Dredged				

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Robert D. Boorum Controller

10/7/76
Date

Due: 25th of Following Month
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services
Pennsylvania Fish Commission
P. O. Box 1673
Harrisburg, Pennsylvania 17120

K # 12889

11/18/76

3192.00

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of October 19 76

Company Erie Sand Steamship Company

Address P.O. Box 153 Erie, Pennsylvania 16512

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PENNSYLVANIA
FISH COMMISSION
Total Amount Due

<u>*Cons or Cubic Yards</u> <u>Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	
<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>43,755</u> <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	<u>Lake Sand</u>	<u>.15 cu.yd.</u>	<u>6563.25</u>

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

11/5/76
Date

R.D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1572

Harrisburg, Pennsylvania 17120

L. # 13066

6563.25

11-12-76

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of November 19 76

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Pennsylvania 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
6820 <u>CU</u> <input checked="" type="checkbox"/> <u>Yards</u>	LAKE SAND	15¢ cu. yd.	\$2,523.00

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Robert D. Boorum Controller

12/3/76
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

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12/13/76

2523.00

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of December 19 76

JAN 3 9 41 AM '77

Company Erie Sand and Steamship Company

PENNSYLVANIA
FISH COMMISSION

Address Foot of Sassafras Street, Erie, Pennsylvania 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input type="checkbox"/> Sold			
<u>1700</u> cu. <input checked="" type="checkbox"/> Dredger	Lake Sand	cu. 15¢ per yard	\$255.00

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

Robert D. Boorum, Asst. Treas.

12/14/76
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

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COMMONWEALTH OF PENNSYLVANIA
 PENNSYLVANIA FISH COMMISSION
 Monthly Statement of Dredging Operations
 Month of January 19 77

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Penna. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

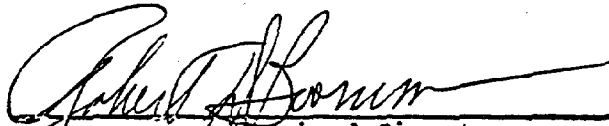
Total Amount Due

-- Tons <input checked="" type="checkbox"/> Sold			
-- Cys <input checked="" type="checkbox"/> Dredged	NONE	NONE	NONE

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or
 15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


 Authorized Signature
 Robert D. Boorum - Controller

2/2/77
 Date

Due: 25th of Following Month
 Make check payable to: Pennsylvania Fish Commission
 Mail to: Office of Director of Administrative Services
 Pennsylvania Fish Commission
 P. O. Box 1673
 Harrisburg, Pennsylvania 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of February 1977

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Company Erie Sand Steamship Company

PENNSYLVANIA
FISH COMMISSION

Address P.O. Box 153, Erie, Penna. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty

Total Amount Due

<u>Tons</u> <input type="checkbox"/> Sold			
<u>CYs</u> <input type="checkbox"/> Dredged	NONE	NONE	NONE

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

3/2/77

Date

Robert D. Boorum - Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of March 1977

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VED

Company Erie Sand Steamship Company

APR 11 10 00 AM '77

Address Post Office Box 153, Erie, Pennsylvania 16512

PENNSYLVANIA
FISH COMMISSION

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

Tons <input checked="" type="checkbox"/> Sold	NONE	NONE	NONE
CYs <input checked="" type="checkbox"/> Dredged			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

4/5/77

Date

Due: 25th of Following Month R.D. Boorum, Controller
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services
Pennsylvania Fish Commission
P. O. Box 1673
Harrisburg, Pennsylvania 17120

MAY 18 10 42 AM '77

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of April 19 77

PENNSYLVANIA
FISH COMMISSION

Company Erie Sand and Steamship Company

Address Foot of Sassafras Street, Erie, Pa. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due


<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>6600</u> <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	<u>Lake Sand</u>	<u>.15</u>	<u>\$990.00</u>

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

5/6/77
Date

R. D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

Transmitted 5/18/77

Ch. # 14325

Date: 5/16/77

Am't: \$ 990.00

RECEIVED
PENNSYLVANIA
FISH COMMISSION

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of May 1977

RECEIVED
JUN 22 9 12 AM '77

PENNSYLVANIA
FISH COMMISSION

Company Erie Sand Steamship Company
Address Ft. of Sassafras Street, Erie, Pennsylvania 16501

<u>*Tons or Cubic Yards</u> <u>Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u> </u> Tons <input type="checkbox"/> Sold			
<u>29845</u> CYs <input checked="" type="checkbox"/> Dredged	Lake Sand	.15	\$4476.75

*Use appropriate line and check applicable block.
**10¢ per adjusted dry ton of 2,000 lbs. or
15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

6/3/77
Date

R.D. Boorum, Controller
Due: 25th of Following Month
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services
Pennsylvania Fish Commission
P. O. Box 1673
Harrisburg, Pennsylvania 17120

CK # 14623
Date 6/20/77
amt \$ 4476.75
posted - 6/22/77

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PENNSYLVANIA
FISH COMMISSION

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of June 19 77

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PENNSYLVANIA
FISH COMMISSION

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7/20/77
d

Company Erie Sand Steamship Company
Address Foot of Sassafras Street, Erie, Pa. 16501

<u>*Tons or Cubic Yards</u> <u>Sold During Month</u>		<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u> </u> Tons <input type="checkbox"/> Sold				
<u>29550</u> CYs <input checked="" type="checkbox"/> Dredged		Lake Sand	15¢ cy	\$4,432.50

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
Robert D. Boorum

7/5/77
Date

Due: 25th of Following Month
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services
Pennsylvania Fish Commission
P. O. Box 1673
Harrisburg, Pennsylvania 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of July 19 77

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PENNSYLVANIA
FISH COMMISSION

Company Erie Sand Steamship Company
Address Ft. of Sassafras St., Erie, Penna. 16501

Rec'd 8/18/77

*Tons or Cubic Yards
Sold During Month Material Royalty** Total Amount Due

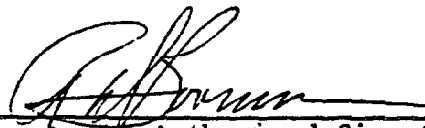
<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
35000 <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	Lake Sand	\$.15 / c.y.	\$5,250.00

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

8/5/77

Date

R.D. Boorum

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

VR #13458

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of August 19 77

SEP 23 1977

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address Foot of Sassafras St., Erie, Pa. 16501

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>22025</u> <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	Lake Sand	.15 cy	\$3303.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



R.D. Boorum, Controller

9/7/77
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

15186

9-7-77

\$3303.75

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of Sept. 1977

RECEIVED

OCT 19 1977

Company Erie Sand Steamship Company

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Address Ft. of Sassafras St. Erie, Pa. 16501

*Tons or Cubic Yards

Sold During Month

Material

Royalty**

Total Amount Due

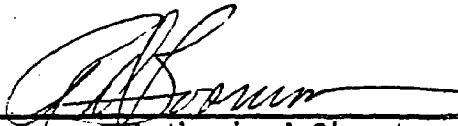
<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
18435 <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	Lake Sand	15ccy	\$2765.25

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

R.D. Boorum, Controller

10/5/77

Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

K# 15485

TE: 10/17/77

tt. \$ 2,765.25

visited: 10/19/77

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of October 1977

RECEIVED

Company Erie Sand Steamship Company

Address Ft. of Sassafras St., Erie, Pa. 16501

NOV 15 1977

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES
Total Amount Due

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>23,820</u> <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	<u>Lake Sand</u>	<u>15¢ cy</u>	<u>\$3573.00</u>

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
R.D. Boorum, Controller

11/10/77

Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

RECEIVED
OFFICE OF
EXECUTIVE DIRECTOR

NOV 28 1977

REFER TO: Paul Chelmer
REPLY DIRECT: _____

rec'd.
11/28/77

K. # 15708

ite: 11/21/77

mt: 3,573.00

p. 11/28

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of November 19 77

RECEIVED

DEC 22 1977

Company Erie Sand Steamship Company

Address Foot of Sassafras Street, Erie, Pennsylvania 16501

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
21685 <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	Lake Sand	\$.15¢ cy	\$3252.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
R. D. Boorum, Controller

12/8/77

Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

15984

12/26/77

43,252.75

12/27/77

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of December 1977

Company Erie Sand Steamship Company

Address Foot of Sassafras Street

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>3610 Cys</u> <input checked="" type="checkbox"/> <u>Dredged</u>	Lake Sand	.15¢ per cy	\$541.50

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
R.D. Boorum, Controller

1/4/78

Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

KA 16079

1/4/78

541.50

cd & Transmitted

1/10/78

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of January 19 78

Unpaid
RECEIVED

FEB 14 1978

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Pa. 16512

<u>*Tons or Cubic Yards</u> <u>Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u> </u> Tons <input checked="" type="checkbox"/> Sold	NONE	NONE	NONE
<u> </u> CYs <input checked="" type="checkbox"/> Dredged			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
R.D. Boorum, Controller

2/6/78
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of February 1978

James
RECEIVED

MAR 6 1978

Company Frie Sand Steamship Company

Address P.O. Box 153, Erie, Pa. 16512

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input checked="" type="checkbox"/> Sold			
<u> </u> CYs <input checked="" type="checkbox"/> Dredged	NONE	NONE	NONE

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

R.D. Boorum, Controller

3/6/78

Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

June

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of March 19 78

RECEIVED

APR 3 1978

Company Erie Sand Steamship Company

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Address P.O. Box 153, Erie, Pa. 16512

*Tons or Cubic Yards

Sold During Month

Material

Royalty**

Total Amount Due


<u> </u> Tons <input type="checkbox"/> Sold	NONE	NONE	NONE
<u> </u> CYs <input type="checkbox"/> Dredged			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
R. D. Boorum, Controller

4/6/78
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of April 19 78

RECEIVED

MAY 24 1978

Company Erie Sand Steamship Company

Address P.O. Box 153 Erie, Pennsylvania 16512

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

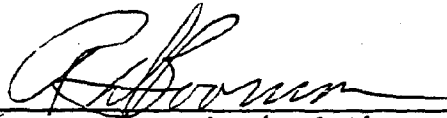
<u>*Tons or Cubic Yards</u> <u>Sold During Month</u>		<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u>13,250</u> Tons <input type="checkbox"/> Sold	CYs <input checked="" type="checkbox"/> Dredged	Lake Sand	\$.15 cy	\$1,987.50

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

R.D. Boorum, Controller

5/1/78
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of May 19 78

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JUN 19 1978

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Co.

Address P.O. Box 153, Erie, Pa. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

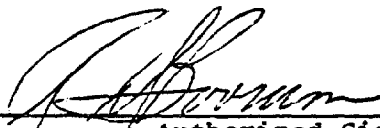
<u>Tons</u> <input type="checkbox"/> <u>Sold</u> 47,440 <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	Lake Sand	15¢ cy	\$7,116.00
--	-----------	--------	------------

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

6/8/78

Date

R.D. Boorum Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

L. H - 17125

ate - 6-14-78

mt. - \$7,116.00

2116. - 6-19-78

Rec'd
7/19/78
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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of June 19 78

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>41,300</u> <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	Lake Sand	.15/cy	\$6195.00

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

7/11/78
Date

Due: 25th of Following Month
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services
Pennsylvania Fish Commission
P. O. Box 1673
Harrisburg, Pennsylvania 17120

K 17346

7/17/78

195.00

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of July 19 78

RECEIVED

AUG 23 1978

Company Erie Sand Steamship Company

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Address P.O. Box 153, Erie, Penna. 16512

2

*Tons or Cubic Yards

Sold During Month

Material

Royalty**

Total Amount Due

<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
33,300 CYs <input checked="" type="checkbox"/> <u>Dredged</u>	Lake Sand	.15 cy	\$4,995.00

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

R. D. Boorum, Controller

8/8/78

Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

Rev. C. H. 1042-2200-106 License from Sand & Gravel Dr. Agency

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of August 1978

RECEIVED

SEP 20 1978

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards

Sold During Month

Material

Royalty**

Total Amount Due

<u>Tons</u> <input type="checkbox"/> Sold			
<u>33840</u> <u>CYs</u> <input checked="" type="checkbox"/> Dredged	Lake Sand	.15 cy	\$5076.00

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

9/7/78

Date

Due: 25th of Following Month R.D. Boorum, Controller
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services
Pennsylvania Fish Commission
P. O. Box 1673
Harrisburg, Pennsylvania 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of September 19 78

Rec'd.
10/18

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Pa. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>29,037 CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	<u>Lake Sand</u>	<u>.15¢ cy</u>	<u>\$4355.55</u> ✓

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
R.D. Boorum Controller

10/9/78
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

dep
10/18

CK. # 18026

10/16/78

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of October 19 78

P.M. too late for deposit (?)
RECEIVED

NOV 22 1978

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Pa. 16512

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>7,150</u> <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	Lake Sand	\$.15 cy	\$4072.50

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
R.D. Boorum, Controller

11/8/78
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of November 19 78

RECEIVED

DEC 13 1978

Company Erie Sand Steamship Co.

Address PO Box 153 Erie, Pa 16512

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

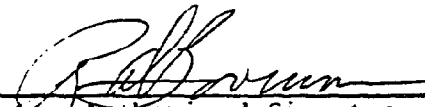
<u>Tons</u> <input checked="" type="checkbox"/> <u>Sold</u>	<u>Lake Sand</u>	<u>@ .15 cy</u>	<u>\$ 3312.00</u>
<u>22,080</u> <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
R.D. Boorum Controller

12/5/78

Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

18582

2/13/78

3312.00

p. 12/19/78

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of December 19 78

RECEIVED

JAN 10 1979

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

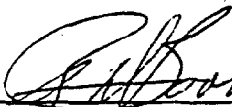
<u>*Tons or Cubic Yards Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
Tons <input type="checkbox"/> Sold			
6975 CYs <input checked="" type="checkbox"/> Dredged	Lake Sand	.15¢ cy	\$ 1,046.25

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

R.D. Boorum Controller

1/3/79

Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

18735

1/8/79

1046.25

1/10/79

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FEB 7 1979

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of January 19 79

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company
Address P.O. Box 153, Erie, Pa. 16512

<u>*Tons or Cubic Yards</u> <u>Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u> </u> Tons <input checked="" type="checkbox"/> Sold	NONE	NONE	NONE
<u> </u> CYs <input checked="" type="checkbox"/> Dredged			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
Robert D. Boorum, Controller

2/5/79

Date

Due: 25th of Following Month
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services,
Pennsylvania Fish Commission, P. O. Box 1673
Harrisburg, Pa. 17120

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of February 19 79

RECEIVED
MAR 7 1979
Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Pa. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

-- Tons <input checked="" type="checkbox"/> Sold			
-- CYs <input checked="" type="checkbox"/> Dredged	NONE	NONE	NONE

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Robert D. Boorum, Controller

3/5/79
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services,
Pennsylvania Fish Commission, P. O. Box 1673
Harrisburg, Pa. 17120

RECEIVED

APR 4 1979

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of March 19 79

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Pa. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input checked="" type="checkbox"/> Sold	NONE	NONE	NONE
<u> </u> CYs <input checked="" type="checkbox"/> Dredged			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

4/2/79

Date

Robert D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services,

• Pennsylvania Fish Commission, P. O. Box 1673

Harrisburg, Pa. 17120

RECEIVED

MAY 16 1979

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of April 19 79

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company ERIE SAND STEAMSHIP COMPANY

Address P. O. Box 153, Erie, Pennsylvania 16512

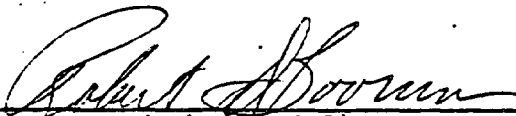
<u>*Tons or Cubic Yards</u> <u>Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u> </u> Tons <input type="checkbox"/> Sold			
<u>9525</u> CYs <input type="checkbox"/> Dredged	Lake Sand	.15 cy	\$1428.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

5/7/79
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services,
Pennsylvania Fish Commission, P. O. Box 1673
Harrisburg, Pa. 17120

K. # 19576

ite: 5-14-79

nt. - \$1428.75

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of May 1979

RECEIVED

JUN 20 1979

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company ERIE SAND STEMASHIP COMPANY

Address P. O. Box 153, Erie, Pennsylvania 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

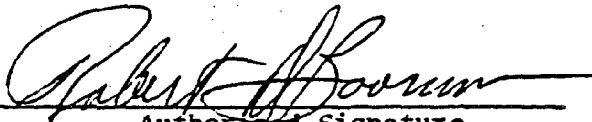
<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
29,425 <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	Lake Sand	.15¢/cy	4,413.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

6/5/79
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P. O. Box 1673

Harrisburg, Pennsylvania 17120

X. # 19839

dated: 6-18-79

amt. 4413.75

by: 6-20-79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of June 19 79

RECEIVED

JUL 18 1979

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company
Address P. O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input type="checkbox"/> Sold			
<u>44,825</u> Cys <input checked="" type="checkbox"/> Dredged	Lake Sand	.15¢/cy	\$6,723.75 ✓

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

7/7/79
Date

Robert D. Boorum, Controller

Due: 25th of Following Month
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services
Pennsylvania Fish Commission
P.O. Box 1673
Harrisburg, PA 17120

20045

7-16-79

6723.75

7/18/79

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of July 19 79

RECEIVED

AUG 22 1979

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u>Tons</u> <input type="checkbox"/> <u>Sold</u>			
<u>32,125</u> <u>CYs</u> <input checked="" type="checkbox"/> <u>Dredged</u>	<u>Lake Sand</u>	<u>.15/cy</u>	<u>4,818.75</u>

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.

 8/7/79
Authorized Signature Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

3K-20291

8/20/79

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4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of August 19 79

RECEIVED

SEP 19 1979

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, Pennsylvania 16512

*Tons or Cubic Yards

Sold During Month Material Royalty** Total Amount Due

<u> </u> Tons <input type="checkbox"/> Sold			
<u>38,020</u> CYs <input checked="" type="checkbox"/> Dredged	Lake Sand	.15/cy	\$5703.00

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.

Robert H. Brown
Authorized Signature *Controller*

9/6/79
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

A 20445

5703.00

9-17-79

9/19/79

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of September 19 79

RECEIVED

OCT 24 1979

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, PA 16512

*Tons or Cubic Yards

Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input type="checkbox"/> Sold			
<u>25,725</u> CYs <input checked="" type="checkbox"/> Dredged	Lake sand	.15¢/cy	\$3,858.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.

Robert K. Brown
Authorized Signature

10/8/79
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

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10/22/79

3858.75

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4/10/79

RECEIVED

NOV 25 1979

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of October 1979

Company Erie Sand Steamship Company
Address P. O. Box 153, Erie, PA 16512


<u>*Tons or Cubic Yards</u> <u>Sold During Month</u>		<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u> </u> Tons <input type="checkbox"/> Sold				
<u>28,735</u> CYs <input checked="" type="checkbox"/> Dredged		Lake sand	.15/cy	\$4,310.25

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Robert D. Boorum, Controller

11/6/79
Date

Due: 25th of Following Month
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services,
Pennsylvania Fish Commission, P. O. Box 1673
Harrisburg, Pa. 17120

P.F. 20957

11/19/79

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of November 1979

DEC 20 1979

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

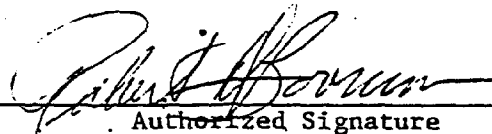
<u> </u> Tons <input type="checkbox"/> Sold			
<u>17,800</u> CYs- <input checked="" type="checkbox"/> Dredged	Lake Sand	.15¢/cy	2,670.00

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
Robert D. Boorum, Controller

12/7/79
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

2/218

4/14/79

2670.00

2/20/79

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of December 19 79

RECEIVED

JAN 10 1980

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

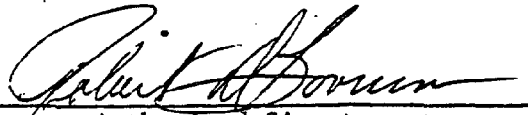
<u> </u> Tons <input type="checkbox"/> Sold			
<u>4700</u> CYs <input checked="" type="checkbox"/> Dredged	Lake Sand	.15¢/cy	\$705.00

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

Robert D. Boorum, Controller

12/26/79
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

22355

dt: 1/7/80

705.00

ma 1/10/79

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of January 19 80

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, PA 16512

*Tons or Cubic Yards

Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input type="checkbox"/> Sold			
<u>- 0 -</u> Cys <input type="checkbox"/> Dredged	none	none	- 0 -

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

2/1/80
Date

Robert D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of February 19 80

RECEIVED

MAR 6 1980

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

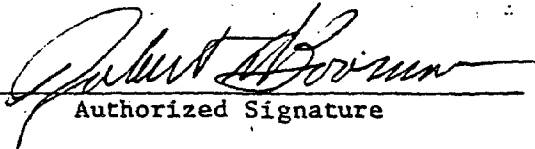
<u> </u> Tons <input type="checkbox"/> Sold	none		- 0 -
<u> </u> CYs <input type="checkbox"/> Dredged			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

3/3/80

Date

Robert D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of March 19 80

RECEIVED

APR 4 1980

Company Erie Sand Steamship Company

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Address P. O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input type="checkbox"/> Sold	none		- 0 -
<u> </u> CYs <input type="checkbox"/> Dredged			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

4/1/80

Date

Robert D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of April 19 80

RECEIVED

MAY 14 1980

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P. O. Box 153, Erie, PA 16512

*Tons or Cubic Yards

Sold During Month

Material

Royalty**

Total Amount Due

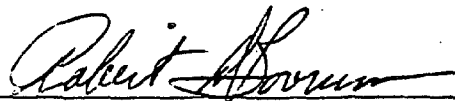
<u> </u> Tons <input type="checkbox"/> Sold			
<u>5925</u> CYs <input checked="" type="checkbox"/> Dredged	Lake Sand	.15	888.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

Robert D. Boorum, Controller

5/8/80
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

21933

to: 5/12/80

1. \$ 888.75

5/14/80

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of May 19 80

RECEIVED

JUN 20 1980

Company Erie Sand Steamship Company

Pennsylvania Fish Commission
Administrative Services

Address P. O. Box 153, Erie, PA 16512

*Tons or Cubic Yards

Sold During Month.

Material

Royalty**

Total Amount Due

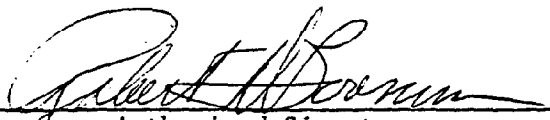
<u> </u> Tons <input type="checkbox"/> Sold			
<u>31,225</u> CYs <input checked="" type="checkbox"/> Dredged	lake sand	.15¢	\$4,683.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

Date

Robert D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

RECEIVED

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of June 1980

JUL 21 1980

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Pa. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due


<u> </u> Tons <input type="checkbox"/> Sold			
<u>18,875</u> CYs <input checked="" type="checkbox"/> Dredged	Lake Sand	.15 CY	\$2,831.25

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
Robert D. Boorum, Controller

7/8/80

Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

RECEIVED

JUL 21 1980

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

4/10/79

RECEIVED

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of July 19 80

AUG 20 1980

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A. ...

Company Erie and Steamship Company

Address P.O. Box 153, Erie, Pa. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

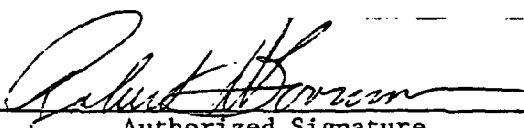
<u> </u> Tons <input type="checkbox"/> Sold <u>33,650</u> CYS <input checked="" type="checkbox"/> Dredged	Lake Sand	15¢ C.Y.	\$5,047.50
---	-----------	----------	------------

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Robert D. Boorum, Controller

8/6/80
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of August 19 80

SEP 19 1980

For Approval and Signature
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

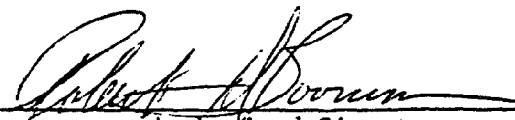
<u> </u> Tons <input type="checkbox"/> Sold			
<u>20,895</u> CYs <input checked="" type="checkbox"/> Dredged	lake sand	.15 per cy	\$3,134.25

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
Robert D. Boorum, Controller

9/8/80
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

RECEIVED

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of September 19 80

OCT 21 1980

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Pa. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input type="checkbox"/> Sold			
<u>19,975</u> CYs <input checked="" type="checkbox"/> Dredged	Lake Sand	.15 CY	\$ 2,996.25

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.

Robert L. Brown
Authorized Signature
cast 6/85

10/7/80
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of October 19 80

RECEIVED

NOV 20 1980

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards

Sold During Month-

Material

Royalty**

Total Amount Due

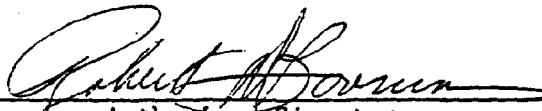
<u> </u> Tons <input type="checkbox"/> Sold			
<u>25,425</u> CYs <input type="checkbox"/> Dredged	Lake Sand	.15/cy	\$3,813.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

Robert D. Boorum, Controller

11/6/80
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

RECEIVED

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of November 19 80

DEC 29 1980

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due


<u> </u> Tons <input type="checkbox"/> Sold			
<u>19,505</u> CYS <input checked="" type="checkbox"/> Dredged	Lake Sand	.15/cy	2,925.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Robert D. Boorum, Controller

12/9/80
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of December 19 80

RECEIVED

DEC 29 1980

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

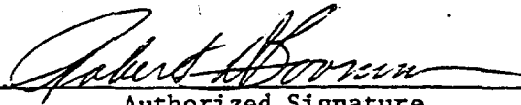
<u> </u> Tons <input type="checkbox"/> Sold			
<u>9,400</u> CYs <input checked="" type="checkbox"/> Dredged	lake sand	.15/cy	1,410.00

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

Date

Robert D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

RECEIVED

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of January 19 81

FEB 9 1981

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due

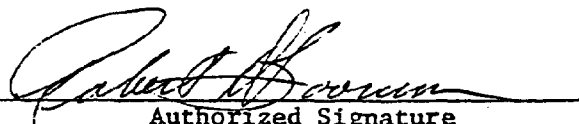
<u> </u> Tons <input type="checkbox"/> Sold	No dredging during the month of January '81		
<u> </u> CYs <input type="checkbox"/> Dredged			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Robert D. Boorum, Controller

Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

RECEIVED

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of February 1981

MAR 10 1981

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards

Sold *During Month

Material

Royalty**

Total Amount Due

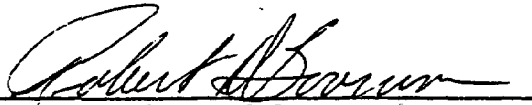
<u> </u> Tons <input type="checkbox"/> Sold	No dredging during the month of February '81		
<u> </u> CYs <input type="checkbox"/> Dredged			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

Robert D. Boorum, Controller

3/3/81
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission.

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

REC-100

APR

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of March 19 81

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards
Sold During Month.

Material

Royalty**

Total Amount Due

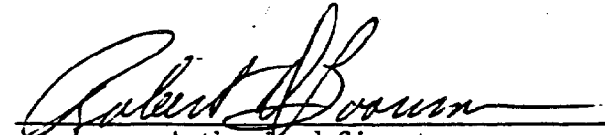
<u> </u> Tons <input type="checkbox"/> Sold	No dredging during the month of March '81		
<u> </u> CYs <input type="checkbox"/> Dredged			

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

Robert D. Boorum, Controller

4/6/81
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of April 19 81

FILED

MAY 14 1981

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards

Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input type="checkbox"/> Sold			
<u>5325</u> Cys <input checked="" type="checkbox"/> Dredged	lake sand	.15/cy	798.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

Date

Robert D. Boorum, Controller

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of May 19 81

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JUN 18 1981

Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards

Sold During Month

Material

Royalty**

Total Amount Due

<u> </u> Tons <input type="checkbox"/> Sold			
<u>26,175</u> CYs <input type="checkbox"/> Dredged	lake sand	.15/cy	\$3,926.25

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature

Robert D. Boorum, Controller

6/8/81
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of June 19 81

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Pennsylvania Fish Commission
ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Co.

Address P.O. Box 153, Erie, PA 16512

*Tons or Cubic Yards

Sold During Month

Material

Royalty**

Total Amount Due

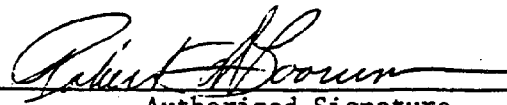
<u> </u> Tons <input type="checkbox"/> Sold			
<u>31,525</u> CYs <input checked="" type="checkbox"/> Dredged	lake sand	.15/cy	4,728.75

*Use appropriate line and check applicable block.

**10¢ per adjusted dry ton of 2,000 lbs. or

15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature

Robert D. Boorum, Controller

7/8/81
Date

Due: 25th of Following Month

Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

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COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of July 19 81

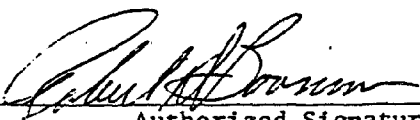
AUG 20 1981

Company Erie Sand Steamship Company
Address P O Box 153, Erie, Pa. 16512

<u>*Tons or Cubic Yards</u> <u>Sold During Month</u>	<u>Material</u>	<u>Royalty**</u>	<u>Total Amount Due</u>
<u> </u> Tons <input type="checkbox"/> Sold			
<u>31,150</u> CYs <input checked="" type="checkbox"/> Dredged	Lake sand	.15/cy	\$4,672.50

*Use appropriate line and check applicable block.
**10¢ per adjusted dry ton of 2,000 lbs. or
15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.


Authorized Signature
Robert D. Boorum, Controller

8/10/81
Date

Due: 25th of Following Month
Make check payable to: Pennsylvania Fish Commission
Mail to: Office of Director of Administrative Services
Pennsylvania Fish Commission
P.O. Box 1673
Harrisburg, PA 17120

4/10/79

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA FISH COMMISSION
Monthly Statement of Dredging Operations
Month of August 19 81

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SEP 12 1981

PAID TO THE
AT ADMINISTRATIVE SERVICES

Company Erie Sand Steamship Company

Address P.O. Box 153, Erie, Pa. 16512

*Tons or Cubic Yards
Sold During Month

Material

Royalty**

Total Amount Due


<u> </u> Tons <input type="checkbox"/> Sold			
<u>27,170</u> CYs <input checked="" type="checkbox"/> Dredged	lake sand	.15 /cy	\$4,075.50

*Use appropriate line and check applicable block.

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15¢ per cubic yard based on 3,000 lbs. per adjusted dry weight.

I hereby certify that the above is a true and correct statement to the best of my knowledge.



Authorized Signature
Robert D. Boorum, Controller

Date

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Make check payable to: Pennsylvania Fish Commission

Mail to: Office of Director of Administrative Services

Pennsylvania Fish Commission

P.O. Box 1673

Harrisburg, PA 17120

4/10/79

